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NATIONAL ACCOUNTS AND BALANCES: SYSTEM OF NATIONAL ACCOUNTS (SNA)

Final report of the Regional Seminar on National Accounts convened by the Economic Commission for Latin America and the Caribbean

SUMMARY

The present report contains a summary of the main recommendations and conclusions of the regional seminar on national accounts convened by the Economic Commission for Latin America and the Caribbean at the Brazilian Institute of Geography and Statistics, Rio de Janeiro, from 18 to 28 September 1990.

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I. MAIN CONCEPTS AND CLASSIFICATIONS OF THE REVISED SNA

A. Valuation

Valuation of production, intermediate consumption, final demand and value added

1. The discussion began with references to the three alternatives for valuating product flow and value added; these three alternatives were included in the supply and demand table contained in the production and income generation accounts. It was pointed out that the taxes on products not included in the value added of each branch of economic activity, in the context of the three valuation alternatives, should be added globally so as to obtain the gross domestic product in terms of market prices. It was emphasized that valuation in terms of basic prices had been the best from the theoretical point of view, but the two alternatives were included in terms of producers' prices for practical reasons.

2. It was remarked that such flexibility might affect international comparability of the data on the gross domestic product (GDP). It was explained, however, that total GDP would not be affected by the various valuation alternatives and that only its distribution by kind of activity would be altered.

3. With regard to the difficulty of reconciliation, where basic prices were used, of the values of taxes on products which had to be deducted from producer-price values and the corresponding taxes collected by the Government, it was stated that such reconciliation was difficult to achieve, particularly for value added tax (VAT), in situations where tax and deduction régimes existed. In practice, net VAT recording was used in preparing national accounts and that tax was not a cost for the production unit. Net treatment had been implicit in the valuation recommended in the 1968 SNA.

4. Participants in favour of the gross VAT treatment remarked that, in their countries, VAT existed alongside other taxes on products and that, in some of those countries, VAT had gradually replaced several other types of taxes on products, so that the proposal not to include VAT in the producers' price would generate non-comparable data over time. By not including VAT-type taxes in the producers' price of output, the greater part of the taxes would be eliminated from the production value. Many taxes could be legally deducted and therefore considered VAT-type taxes. If the VAT category was expanded by including all VAT-type taxes, the result could be a producers' price unstable over time, because the legal possibilities of deduction varied for the different types of tax on products.

5. Conclusion: There was no agreement in the region on the gross or net VAT treatment of valuation. Agreement was reached on the use of mixed prices, although the use of producers' prices was also favoured.

B. Integrated analysis of production, income generation and income distribution

1. Statistical units

6. The definitions of statistical units in the revised SNA were reviewed and more clearly expressed: establishments and institutional units. Institutional units were the basic units for the full range of accounts, and reference was made to the difficulty that might arise in linking, by kind of activity and by institutional sectors, the production accounts recommended by the expert groups. It seemed difficult to reconcile the information on production and intermediate consumption because the enterprises' information was consolidated, and the establishments' information included product flows between establishments of the same enterprise. It was also difficult to reconcile value-added data and to classify them by establishment activities and institutional sectors because of the problems that arose in relating the establishments' basic information to their parent company. Emphasis was laid on the need to continue using the SNA approach based on the method of production by establishment, because the establishment was the base of all basic information by economic activity.

7. Some members favoured the institutional classification approach of the revised SNA because that approach showed properly how the institutionally organized economy worked. It was mentioned that reconciliation did not present serious problems because there was no need for reconciliation at the individual unit level but at the institutional sectors level. Reconciliation might be possible at the units level for some groups of enterprises, but only for base years. There were no difficulties for some sectors, such as financial corporations or public enterprises, and that depended on the use made of statistical sources. It was remarked that, by applying the institutional approach, new sources of information, not previously used in preparing national accounts, would be incorporated.

8. Conclusion: It was agreed to incorporate a complete set of accounts by institutional sector in the revised SNA although, for the purpose of calculating the domestic product, preference should continue to be given to the establishment unit. As a consequence, the value of production and intermediate consumption in institutional accounts should be recorded in gross terms. The importance of accounts by institutional sector was mentioned; in the case of practical problems, accounting should be carried out progressively on the basis of accounting data. The items in the rest of the private sector would be set by differential.

2. Production boundaries

9. The production boundaries of the revised SNA have not changed substantially from those in the 1968 SNA; clarifications and specifications were introduced. The expert groups had decided that the production of all goods should be included within the production boundaries, and that the production of services should be included only where they were rendered by one unit to another, different unit. Under that definition, services produced and utilized in the same household should be excluded from the production boundaries.

10. It was doubtful whether the distinction between goods and services was sufficiently developed for that highly important boundary of the system to be defined. Criteria were necessary to justify clearly the classification of activities, such as the supplying of water or the storage of goods for own use, within or outside the production boundaries. The expert groups had recommended that goods storage should be included within the production boundary. Such goods turned out to be of a different nature owing to the cost of storage. Moreover, in the case of water, a distinction would have to be made between the production of water, which constituted a good, and its conveyance by boat, truck and the like, which constituted a service.

11. Some participants remarked that the production boundary did not have to include own-produced inputs. The need to distinguish between the definition of production boundary and its measurement was made clear. The revised SNA proposed that the part of production which was used within the establishment itself should not be measured, and it was made clear that a special problem existed in the case of agriculture where the concept "national farm" was used, for that required the inclusion of production for the sector as a whole in net terms.

12. Conclusion: In principle, agreement was reached on the recommendation, but attention was drawn to the need to define the scope of the illegal activities of the underground and informal economy. It was also stated that the measurement of goods production would not include own-produced inputs and that, in the case of services production, services for own-use which were related to capital formation, such as repairs, would be included. The majority rejected the suggestion that part of the housewife's work should be included. It was made clear that storage in the agricultural sector by the same production units was part of that establishment's production.

3. Market and non-market production

13. Several issues - unresolved by the expert groups - on the distinction between market and non-market producers and products were emphasized. In principle, market producers should cover 50 per cent or more of their costs through sales and non-market producers less than 50 per cent; the price of market products should be established on a market-price basis, whereas non-market products should be valuated on the basis of their costs. It was still unclear whether all corporations should or should not be classified as market producers, or whether, in that case, the 50 per cent criterion had to be applied also. Another unresolved issue was whether quasi-corporations not complying with the 50 per cent criterion assigned themselves to the government sector or to the corporate sector. In the latter case, the problem was one of valuating their production in terms of prices actually paid, including subsidies covering deficits, or of valuating their production at cost, while considering the part not covered by sales to be government consumption.

14. Examples of public enterprises not covering 50 per cent of their costs were mentioned: railways, mining enterprises, electricity generating plants and development banks not covering their costs with the interest they received. It was suggested that, for the purpose of identifying market units, the rigid criterion of

covering 50 per cent of their costs should not be emphasized and that priority should be given to the objective or function of the production unit. Other participants suggested that non-market units, such as community and social services, should be identified only in terms of the specific activities in the International Standard Industrial Classification of All Economic Activities (ISIC). It was also stated that the 50 per cent criterion did not clearly distinguish between the various external influences, which could create deficits in production units.

15. Several participants suggested that the use of subsidies should be maintained so as to deal with the differences between costs and prices, because treatment of those differences as government consumption expenditures was not advisable in that it would eliminate almost all GDP subsidies.

16. Conclusion: The participants considered that the 50 per cent criterion suggested for establishing the division between market and non-market production was inadequate and very rigid and that deeper study of the topic was necessary.

4. Alternative income concepts related to production

17. It was explained that the revised SNA included the following three new income concepts: primary income, entrepreneurial income and mixed income. Primary income resulted from allocating the value added to work, capital and government (taxes on production) and eventually in both directions with regard to the rest of the world. The sum of primary income of institutional sectors would then be equivalent to the national income for the national economy. Entrepreneurial income was an intermediate concept between the operating surplus and the primary income. In the case of corporations, it could be obtained by subtracting from the operating surplus the property income paid and by adding the property income received and, in the case of households, by subtracting only the property income paid in the context of management of an unincorporated private enterprise. In both cases, the entrepreneurial income would include profits before taxes. In the household sector, property income was not added to obtain the entrepreneurial income, because it was assumed that all property income received by households was received in their status as households and not as owners of unincorporated enterprises. The term "mixed income" would replace the concept of operating surplus of the production units included in the household sector; the expert groups had made that proposal because that term would better reflect the nature of the operating surplus in that sector, which included not only entrepreneurial income and remuneration of capital but also a component of remuneration of labour. The operating surplus derived from imputation of the production and value added of the services of owner-occupied dwellings would continue to be treated as an operating surplus and not as mixed income.

18. One participant pointed out that the operating surplus concept was sufficiently identified in a separate sector - households - without needing to be renamed. Another participant remarked that the new concept would serve as a point of departure for distinguishing between incomes generated in the formal and informal sectors. Another participant, who had supported the new concept, suggested that another term should be used to identify it.

19. Conclusion: There was agreement on the primary income and entrepreneurial income concepts. So far as the new concept of mixed income was concerned, most of the participants said that that would be neither useful nor meaningful because, by definition, in all unincorporated units the surplus always included the work done by the owner. Although the term "mixed income" was not the most appropriate, some countries maintained that the concept was necessary for analysing, at the aggregrate level, the measured part of the informal sector.

C. Integration of stock analysis with the traditional flow analysis of the national accounts

20. It was emphasized in the introduction on the valuation, classification and coverage of assets that the topic of assets, as a whole, was still an unresolved issue. For that reason, the participants were requested to submit their papers on the subject so that the expert groups could discuss them at their next meeting.

1. General principles: coverage, classification, valuation and moment of recording

21. The revised SNA would divide a primary level of detail into financial and non-financial assets. Those assets could be subdivided, at a secondary level, into produced and non-produced assets and, as a further breakdown, into a third level of disaggregation between tangible and intangible assets. The expert groups had discussed an innovation consisting of introducing into the system fixed assets which could be intangible but produced assets, encompassing research and development, capitalized mineral exploration costs, computing programmes and literary artistic work. With regard to changes in assets, a distinction was made between gross capital formation, net purchases of land and other non-produced assets, other changes in the volume of assets and liabilities, nominal capital gains or losses and changes in the structure and classification (of assets and liabilities). The difference between produced and non-produced assets was not necessarily the same in the classification of holdings of assets and in the classification of the changes that had taken place. One example could be land improvements which were included in capital formation as a produced asset, but would not appear in the holdings as a capital formation asset but instead they would be included in the land value. Likewise, capital goods repairs constituted a category of gross fixed capital formation, but did not appear as a separate asset in asset inventories; however, their value was included in the value of buildings or structures where such capital repairs had been made. It was also made clear that the revised SNA would incorporate an annex on the conceptual and methodological aspects of assessing fixed asset inventories. The perpetual inventory system and other related matters would be dealt with in that annex.

22. As for the recommendation to include residential and non-residential buildings in fixed capital formation only at the moment when they had a buyer, reference was made to the case of the treatment given when the Government was the agent that initiated the construction of dwellings before allocating them to tenants; the problems involved in identifying the moment of transfer of the goods to users;

the treatment where prepayments were made which did not necessarily coincide with the progress of the work; the treatment of "time sharing" in apartment purchases. Questions were also raised on the rules for recording the operating surplus of construction works: whether it should be recorded while work was in progress or when it had been completed.

2. Intangible assets

23. If it were decided to include intangible assets as produced assets, the question of how to deal with patents, copyrights and other similar assets would arise. The procedure for dealing with received income and capital consumption by using such assets would also have to be determined. They were currently considered to be non-produced assets generating property income and, if they were taken to be produced assets, they should be included in a wider production boundary and their income should be considered as deriving from non-factor services.

24. In the discussion on the coverage of costs with respect to intangible assets, the question was asked whether the costs of publications for disseminating the results of research and development activities and the costs involved in training employees in the use of new technologies were included. The reply was that, although the expert groups had not discussed those aspects in depth, caution must be exercised in incorporating costs related to human capital in intangible capital. Other questions were raised on the coverage of government expenditures on research and development generating intangible assets, and on the economic activity to which the production of the intangible asset pertained in the case of mineral exploration.

25. In reply to the question on the coverage and treatment of expenditures on the maintenance of computer programmes which would be treated as fixed assets, it was stated that the same distinction was made between current and capital maintenance, whereby current maintenance was intermediate consumption and capital maintenance was fixed capital formation which increased the capital incorporated by the computer programmes. It was explained that the coverage of property income should be revised in relation to the treatment of income generated by intangible assets. In that case, the payments were clearly different from land rent payments.

26. With respect to mineral exploration, it was pointed out that all exploration expenditures were included as fixed capital in oil industry accounting. Where exploration was unsuccessful, those expenditures were reclassified as capital losses.

27. Conclusion: Agreement was reached on the proposal in general and, in particular, on the inclusion of intangible assets in capital formation. So far as those intangible assets were concerned, the study would be continued in order to determine more precisely, the scope and treatment of the income they generated, as well as aspects of their depreciation.

3. Environmental assets and environmental accounting

28. Environmental assets were divided into three main groups: cultivated natural assets, which were included as fixed produced assets, and land and subsoil assets, which were included as non-produced tangible assets. All those natural growth or controlled growth products formed part of the production during their growth, and the production value could be based on the market value base.

29. It was explained that if farm output was based on natural growth and such production was included in the stocks during their growth, crop losses should also be taken into account. In the case of such losses, a distinction should be made between periodic or normal losses and losses caused by disasters. The first-mentioned losses had to be reflected in production adjustments, which were included in stocks, whereas the others were stock losses, which had to be reflected in the account of other changes in the volume of assets. A distortion was introduced in national accounting when natural forests were destroyed to be used for economic purposes and parts of those forests were later replaced. The destruction of natural forests was not taken into account, the conversion of forests for economic purposes (farmland) was reflected in gross fixed capital formation when there were economic land "improvements", and the replacing of forests was also included in gross capital formation.

30. It was explained that, in principle, all natural assets affected by economic activity - the exhaustion of mineral deposits or water and air deterioration - were included in the environmental accounting system. Nevertheless, there was no proposal to make balances for non-economic assets, such as air, water and natural forests, for which there was no market valuation. Only balances in monetary terms were included for the economic assets which were similar to the SNA balances. The costs of economic activities affecting non-economic assets were also included.

31. Conclusion: Agreement was reached on the treatment of natural growth, but no specific position was taken on the valuation of standing crops. The participants agreed that environmental accounting should be developed as a satellite system of the revised SNA, although they had some misgivings about the data required for implementing such a system over the short term.

D. Financial instruments, financial sector and financial accounts

1. Imputations by financial intermediation services: banking and insurance services

32. The expert groups had suggested several changes in the production and distribution of financial intermediaries, namely, banks and insurance companies. In the case of banking, it was proposed that consideration should be given to bank production as "real" production, which was only an approximation made by adding current charges for banking services; banking services were imputed charges based on the difference between property income paid and received. In other words, the imputations themselves had not changed but their character had.

33. On the subject of bank imputation, questions were raised concerning the treatment for exchange-rate fluctuations affecting the interest received and paid by banks and for taking into account offsettings for capital losses which were reflected in high interest rates. An exact definition of the interest rate of reference was requested and alternative suggestions were made for distributing bank imputation by sectors based on the loans and deposits which those sectors had with the banks.

34. Conclusion: In principle, agreement was reached on the valuation of services related to the imputed charges of financial intermediation services and to the insurance service charges. Note was taken of the progress made in the study for defining more precisely the criteria on the allocation of banking services by different uses.

2. Financial intermediaries and financial auxiliary units

35. It was recommended that the financial sector in the revised SNA should be expanded to include auxiliary enterprises which facilitated financial intermediation. The role and corresponding treatment of central banks were discussed because, in many countries, they engaged in dealings which went beyond regular central bank practice and they had therefore to be differentiated from other banks. When reserves of the central bank were deposited abroad, there were difficulties in the way of assessing the bank's production because of exchange-rate fluctuations and also because many external debt payments were channelled through the central bank. Finally, mention was made of the problem of assigning the production of central banks to specific sectors because they actually served the whole country.

36. Conclusion: Clarification of the financial intermediaries concept was requested, as was a more precise definition of the treatment of central banks, bearing in mind the special role which they fulfilled in the region, the placement of their reserves abroad and the special government investment funds.

3. Financial instruments

37. There were two new aspects of assets and liabilities in the revised SNA. First of all, it was proposed that the revised SNA should include a definition of a financial asset which required a reimbursement by a creditor or debtor under specific or contractually predetermined circumstances. Financial assets included only those in which the creditor had an unconditional claim on the debtor. Contingent positions were not included. Secondly, the system would include a detailed classification of the financial instruments reflecting the new financial instruments developed since the 1968 SNA.

38. Questions were asked about the compatibility of the moment of recording zero coupon bonds between SNA (on an accrual basis) and the balance of payments (on a cash basis). One participant suggested that two subcategories should be differentiated in the category of shares and other equities at the second level of

financial asset classification. It was also suggested that the classification of financial instruments should be expanded so that specific financial instruments, such as bank acceptances, repurchase agreements and zero coupon bonds, could be clearly identified.

39. With regard to the question of whether the revised SNA would include the foreign investment concept, it was pointed out that there were no changes in the revised SNA as compared with the 1968 version. In both systems, a fictitious non-resident unit which had a financial link with the country of origin was created. Therefore foreign investment in terms of non-financial capital was not identified in a separate way.

40. Conclusion: Agreement was reached on the proposal to classify financial instruments, and it was made clear that the treatment of interest on zero coupon bonds was consistent with the new general criterion to record interest on an accrual basis.

E. Transfer of resources between countries

1. Residence

41. The expert groups had recommended that residence should be assigned on the basis of its centre of interest. The principle was developed in operational terms for individuals, enterprises and international bodies. The main criteria for determining the residence of individuals and enterprises were discussed; it was considered that the one-year rule should be applied flexibly, especially in the case of construction activities. International and regional bodies would be treated as in the present SNA.

42. The expert groups had discussed the treatment of the residence of banks and non-financial enterprises established in countries with extraterritorial status. Special mention was made of "off-shore" banks, oil-company branches and non-financial enterprises whose operations and finances were outside the control of the Government of the country in which they were situated. According to some participants, the recommendation to incorporate them as residents of such countries created insuperable problems with regard to obtaining information and, in addition, it would increase the GDP of those countries to an unrealistic level.

43. Conclusion: Agreement was reached on the treatment of the residence concept and on transactions related to the external sector; emphasis was laid on the special status of "off-shore" banks and free zones and on the treatment proposed in the case of reinvestment of profits from direct investments.

2. Reinvested earnings of direct investments, direct investment enterprises, external control

44. In order to co-ordinate the system with the present balance-of-payment treatment, the expert groups had proposed that reinvested earnings should be introduced in the revised SNA. Such earnings would be introduced as part of paid/received property income in the external sector and, at the same time, would be reflected as an increase in external assets/liabilities.

45. The incorporation, within the appropriation of the primary income account, of reinvested earnings on foreign direct investment, as well as of private unincorporated units included in the household sector, which could have direct investment shares in non-resident enterprises, was questioned: it was stated that the inclusion of imputations for reinvested earnings from direct investments would change the country's savings concept in an unacceptable form. It was also remarked that savings resulting from such imputation was the correct savings concept.

3. Write-off of bad debts

46. An explanation was given of changes in the topic in relation to the 1968 SNA, and on the treatment of the voluntary write-off of debt, provisions for bad debts, write-downs of financial assets and payment arrears. The problem of whether the external debt was valuated at the moment of write-off at nominal value or at a lower value was raised. Reference was also made to the problem of valuation of bonds issued by the Government to non-residents and residents at values below the nominal value of the external debt as financing such debt.

47. Conclusion: The participants requested that account should be taken of the recommendations on the treatment and valuation of capitalization of the external debt.

Multiple exchange rates and other aspects of the valuation of external transactions

48. It was stated that the expert groups had discussed the treatment of the valuation of external transactions in detail and that their conclusions and questions were contained in the discussion paper. An inflation factor was implicitly included in the conversion to national currency of external transactions. In principle, that component should be excluded from the valuation of external transactions. There were several questions and comments concerning aspects of the multiple exchange-rate treatment, which have not been responded to so far. Reference was made to the problem of valuating external transactions which were made exclusively in foreign-currency prices. The problem of how to treat income from private banks obtained through exchange differentials resulting from official multiple exchange rates was raised. Questions were also asked about ways of reconciling the income, based on official multiple exchange rates, from transactions carried out in the external sector, with the income received by the central bank or Government.

49. With regard to the recommendation to make global adjustments in the external sector accounts for official exchange-rate differentials, questions were raised about how such differentials would be treated when measurements at constant prices were used and in the calculation of the terms of trade. In principle, agreement was reached on the treatment of exchange-rate differentials as taxes (on products, income or capital), even though such income was received by the central bank. It was noted that those exchange-rate differentials received by the central bank on the basis of an official multiple exchange-rate system had replaced the taxes/subsidies on products which had been taxed in previous periods.

50. There was no agreement on ways of dealing with the parallel market vis-à-vis the official exchange market. As the parallel market had to be completely separate from the official market, it must be treated in a different way without making global adjustments in the external accounts. Other participants viewed the parallel market as an extension of the official exchange market and were of the opinion that interrelated treatment of transactions in the two types of market was therefore necessary. Enterprises and individuals in a given country could, within the limits of the law, choose to purchase or sell their currencies on the official market or in private banks. Examples of some not very obvious aspects of multiple exchange rates were given. In one country, for example, the external debt of an enterprise had been index-linked basically at a rate lower than the rate of inflation.

51. Conclusion: The topic of multiple exchange rates for the standard valuation of external transactions as an adjustment to the overall level of the nation's consolidated accounts was considered important, although it was considered convenient to complete the guidelines for its practical implementation, including the treatment of the parallel market.

F. Analysis of inflation

1. Constant price accounting

52. The use of chain indices was discussed in order to analyse short-term changes, the treatment of different prices for identical products according to the circumstances and situations in which the goods were sold, and the distinctive features of price and quantity measurements for non-market goods and services, particularly those of the Government. The question arose about whether the Laspeyres-type of fixed-base volume indices should be changed or replaced by chain indices, since the weights of the latter would change each year. The expert groups had suggested that the chain indices should be presented as supplements to fixed-base volume indicators.

53. The participants discussed the distinction between identical goods sold at different prices, which should be considered as different goods sold at different prices so as to reflect different quality, and goods which should be treated as identical goods in the strict sense and for which weighted prices should be used. Examples mentioned included electric power, telephone rates and petroleum products, which are usually sold in separate markets. The view was expressed that if these

goods were sold in separate markets and hence were not transferrable from one market to another, they should be treated as different goods. That applied specifically to services, the importance of which had increased substantially in recent years.

54. With regard to the use of appropriate indices for extrapolating non-market services, such as health, it was pointed out that the indicators for the use of health services did not give a true picture of the state of health of the population. It was emphasized that SNA did not measure aspects of well-being, such as health, but rather economic indicators like output and consumption.

55. Conclusion: There was agreement with regard to the treatment of constant price estimates, as outlined in the discussion paper. With regard to the treatment of identical goods for different categories of consumers, participants favoured an approach which considered them as different goods.

2. Trading gains and losses from changes in the terms of trade, and real national disposal income

56. The expert groups had proposed that gains and losses resulting from changes in the terms of trade should be made an integral part of the revised SNA. Such gains and losses would be added to GDP at constant prices in order to derive a new income aggregate called real gross domestic income (real GDI). The system would also include the concept of real national income and real national disposable income, which is derived from real GDI by including in the latter net factor income and current transfers from abroad at constant prices with the implicit deflator for gross final domestic expenditure. It was common practice in the region to use the price index for imports to deflate the balance of trade of non-factor goods and services.

57. Conclusion: With respect to the item on the terms of trade, the seminar took note of the recommendation on the importance of estimates of real national income, in spite of the fact that it was not possible to propose single indices for deflating the different components or standard indices that could be applied to all countries.

3. Revaluation of changes in stocks, including work-in-progress

58. The expert groups had discussed the estimation of changes in stocks and the valuation of work-in-progress. The conclusions reached were set out in the discussion paper. In view of the difficulty of interpreting changes in stocks when inflation was high, it was suggested that such changes should be divided into two components, one reflecting changes in the volume of stocks and the other reflecting the difference in price between the opening and closing values. In that connection, a specific adjustment was suggested, consisting in the valuing of changes in stocks at average prices multiplied by the difference between the use and supply prices.

59. It was stated that, in calculating capital gains on stocks, account should be taken of storage costs, which were also affected by rising prices in the period during which the goods remained in stock and that trade margins might well be negative in times of inflation since dealers might profit from gains on the stocks they held. It was stated that construction projects should be considered as an integrated good which must be valued on the basis of the costs incurred throughout the period during which the work was done. Only when the work was completed could the difference between the market value of the work and the accrued costs arising during the construction period be calculated; it was suggested that that difference should be treated as a revaluation.

60. Conclusion: There was agreement with the general treatment proposed, whereby income resulting from capital gains or losses would be separated from the value of changes in stocks. For practical purposes, a proposal was made to adjust the suggested calculation in order to approximate more closely the ideal estimate that was sought. In addition, a request was made for clarification of the treatment of storage costs in determining producers' prices.

4. Inflation accounting

(a) Capital gains: nominal, neutral and real

61. The sequence of accounts for institutional units included a revaluation account reflecting nominal capital gains (or losses) and, in addition, showing the real and neutral components separately. Neutral gains were defined in terms of changes in the general price level and real gains as the difference between nominal (total current change) and neutral gains. It was noted that the recommendation was to use the implicit deflator of gross domestic expenditure as the indicator of the general price level.

62. It was explained in the general discussion that, although there had been no revaluation of some financial assets in inflationary situations, such assets could yield real capital gains or losses after deduction for inflation in the general price level. It was pointed out that capital gains were recorded before tax payment. Tax payments were generally treated as current transfers.

63. It was suggested that the revaluation account should be calculated residually, so that capital gains would approximate gains obtained during the year. It was pointed out, in reply, that in periods of high inflation, such an approximation could be very different from the calculation of the proposed revaluation, since it did not include changes in the price of assets appearing or disappearing during the period.

64. Conclusion: With regard to the proposal regarding the treatment of nominal, neutral and real gains, attention was drawn to the inconsistency in reflecting capital gains or losses between opening and closing balance sheets and not doing likewise for gains realized during the accounting period.

(b) Real versus nominal interest and index-linked securities

65. The expert groups had considered and rejected, for several reasons, the inclusion of real, rather than nominal, interest in the primary distribution of income account. Real interest included only income that was not compensation for losses of capital.

66. In the discussion of real national disposable income, participants stated that real net factor income from abroad should include real rather than nominal interest on the external debt, reflecting adjustments for the revaluation of the external debt in local currency. One participant stated that real interest should be deflated. The participants who supported the inclusion of real interest in the primary distribution of income account indicated that in periods of high inflation the distribution of disposable income was distorted: the disposable income of debtors was low, while that of creditors was high. The result was a concept of saving of enterprises that was not very meaningful and that distorted the relationship between the consumption of households and households' disposable income.

67. It was stated that in financial analysis monetary adjustments were treated as one of the elements that explained changes in the value of assets and liabilities in the balance sheet; that is to say, monetary adjustment was treated as an item in the revaluation account. In support of that position, it was emphasized that the payment of interest in periods of high inflation in fact meant that the debtor paid part of his debt again. With respect to the treatment of indexed-linked securities, some participants indicated that there were discrepancies between the expert groups' recommendations concerning indexed-linked securities and other indexed securities which adjusted the redemption price. The expert groups had suggested that all interest paid should be treated as nominal interest, including the indexed portion, whereas in the case of the latter it recommended that only interest should be treated as nominal interest and that the additional amount paid upon redemption should be treated as a capital revaluation.

68. Conclusion: The majority of participants emphasized the necessity of recording real interest in the primary distribution income account since that was useful for economic analysis. Nominal interest should be shown together with the items of adjustments which are made owing to gains or losses resulting from inflation. The remaining participants stressed that the issue deserved more detailed study, given its importance, complexity and similarity with other transactions. Consequently, the countries which supported the inclusion of real interest favoured equal treatment in this case.

G. The role of the household sector in the economic process

1. Households, non-profit institutions, formal versus informal activities

69. The importance of households as producers in developing countries was emphasized. Most participants agreed that the distinction between formal and informal activities was important for analysis in the region. However, there was concern over the definition of informal activities, which might result in a very large sector that was not very meaningful for analysis. Mention was made of informal activities that were extensions of the production activities of large enterprises clearly belonging to the formal sector, such as the activities of pedlars who sold the goods of such companies but were not their employees. One participant suggested that, as a starting point, the notion of mixed household income should be taken as an approximation of the contribution made by the informal sector to GDP so as to avoid the erroneous conclusion that the role played by labour in production had declined in comparison with that of capital; in fact, as a consequence of the increase of the mixed income of the informal sector, there was a decrease of participation of labour. Other participants did not, however, agree, because that position implicitly assumed that the distinction between formal and informal was the same as the distinction between corporations and quasi-corporations on the one hand and unincorporated enterprises on the other.

70. Participants commented on the criteria used to distinguish between non-profit institutions included in the household sector and those which were part of the Government. The view was expressed that the criteria of financing and sector served should be given equal weight in deciding how to classify such institutions. It was stated that the informal sector could be dealt with in satellite accounts which would be as important for the region as the satellite accounts for the environment.

71. It was explained that individuals in prisons, convents, hospitals and the like were included in the breakdown of households by socio-economic group in the category of recipients of property income and other transfers. Clarification was requested concerning the treatment of volunteer work for the maintenance of public streets: whether the value of the labour should be imputed and the output of such activity treated as a transfer in kind between households and the Government. It was stated in reply that the expert groups had not considered how that case should be treated. The only proposal made was that the valuation of capital goods created as a result of community activities should reflect the imputed value of volunteer labour.

72. Conclusion: The participants noted the emphasis which the revised SNA would give to the household sector, emphasizing, among other things, income distribution and endeavouring to reach a consensus on the distinction between formal and informal activities. In that connection, participants agreed with the inclusion of private non-profit institutions (PNPIS) with households in a single sector, or to the proposed classification for the household subsector. With respect to the distinction between formal and informal activities, participants recognized the difficulties involved in drawing an appropriate boundary between them and in

applying the distinction systematically in practice to all household subsectors. Notwithstanding the foregoing, the participants stressed the importance of continuing the studies needed for effective application of the distinction.

2. Consumption expenditure, actual consumption and disposable income

73. The revised SNA proposed the inclusion of two concepts for household and government consumption. One of them, final consumption expenditure, referred to outlays made by households and the Government for items of consumption. The second concept, actual final consumption, included additionally, for households, those expenditures made by the Government which were "individualizable", such as education and health, whereas other final consumption expenditures of the Government which were of a collective nature, such as defence and law enforcement, would remain under the actual final consumption of the government sector. The distinction between collective consumption and individualizable consumption paid for by the Government would be made on the basis of the categories of the Classification of the Functions of Government. The two concepts of consumption, for the two sectors, corresponded to two alternative concepts of income - disposable income and adjusted disposable income; the difference between the two would be government transfers in kind to households, which constituted the difference between the final actual consumption and the final consumption expenditure of households. The total final consumption expenditure of households and the Government should be equal to the total actual consumption expenditure of the two combined; disposable income less consumption expenditure and adjusted disposable income less actual consumption of households and the Government yielded the same savings for each sector.

74. With regard to the supply and demand table, it was explained that government consumption expenditure had two components: (1) government services produced by the Government itself and not sold; and (2) goods purchased by the Government and distributed to the population without processing. The treatment proposed by the Expert Groups had several implications. First, the aggregate final consumption expenditures of the Government were higher than the output of government services for its own use, and the differential was the goods distributed by the Government without any processing. Such transfers of goods to the population were included under transfers in kind, which constituted the difference between final consumption expenditure and actual final consumption by households. Another implication was that the column for individual government expenditures might include different categories of products (the Central Product Classification) and the column for final consumption expenditures of the government might include different categories of governmental services (general administration and defence, education, health and so on).

75. It was explained that subdividing the household sector into households and PNPIs was necessary in order to identify the components of collective and individual consumption included in the consumption of PNPIs. Collective consumption must be subtracted from the final consumption expenditure of households in order to be able to reconstruct the actual final consumption of households. Some participants asked whether any collective final consumption expenditures were included in the final consumption of PNPIs serving only households.

76. With regard to the treatment of educational and health services usually provided by enterprises, not just to the families of their employees but to other members of the community as well, mention was made of the fact that the expert groups had not identified transfers in kind between enterprises and households, but only between Governments and households. The negative difference between government output and final consumption in that sector was explained by the separate treatment of transfers in kind from the Government to households; for example, food and clothing purchased by the Government for transfer, without any processing, to various sectors of the population.

77. With regard to expenditure by enterprises ultimately benefiting households, there were two cases of purchases by enterprises which were not clearly components of intermediate consumption by those enterprises: used clothing and food purchased by the enterprise for sale to the public and its employees, and purchases of uniforms used by the enterprise to promote the sale of its products under contractual arrangements with individuals not in its employ. It was stated that, in the former case, such purchases were transactions in which the enterprise acted as an intermediary selling imported products and taking a trade margin; in the latter case, the purchase of uniforms was intermediate consumption by the enterprise for advertising purposes. Mention was also made of the case of expenditures which some mining companies were required by law to make for the provision of hospital services and schools for the entire community. Although the expert groups had not considered that kind of expenditure, it could, owing to its legal character, be treated as taxes and not as transfers to households.

78. It was stated that if cultural or recreational services of the Government were provided by non-profit institutions, it would be possible to identify two situations: in the first, the Government provided majority financing for the non-profit institution, which meant that the institution was part of the government sector, and the institution's expenditures were internal expenditures of the government sector; in the second, the institution did not receive majority financing from the Government and hence was a private non-profit institution separate from the Government, and its expenditures were treated as government transfers to the private non-profit institution.

79. Conclusion: The seminar agreed to the inclusion in the system of the new concepts of actual final consumption and adjusted disposable income, in view of their importance for analysis, and it agreed not to introduce a new category of final consumption expenditures of enterprises.

H. Role of the public sector

1. Imputation of rent on government buildings, consumption of fixed capital on roads, dams and other public infrastructure

80. The expert groups had sought to introduce in the revised SNA imputations for the rental value of buildings used and owned by the Government and to introduce consumption of fixed capital for all public fixed assets. In general, there was no support for the inclusion of imputed rent for government buildings. One reason

mentioned was that an imputation of that kind would result in a disproportionate increase in the contribution of the government sector to the GDP. Another was the problem of obtaining information. While not supporting the proposal, one participant was of the view that such treatment was justified when several property transfers between the private and government sectors took place.

81. With regard to the deterioration of roads as a result of inadequate current expenditures on maintenance, it was stated that, while maintenance expenditure was exclusively current, it affected the pace of obsolescence and there was therefore justification for the introduction of a calculation for the consumption of fixed capital.

82. Conclusion: The participants did not support the inclusion of an imputation for the net operating surplus in respect of buildings used by the Government for its own purposes, primarily on practical grounds. There was, however, agreement to calculate the consumption of fixed capital on roads and other public infrastructure.

2. Public enterprises

83. The explanation concerning public enterprises consisted in a clarification of the general principles proposed for distinguishing in the public sector between units that would be considered corporations (including quasi-corporations) and unincorporated government units. Comments were made on the criterion for distinguishing public corporations from private enterprises, which was majority participation of the Government in capital, or government control over management of the unit.

84. It was suggested that the criterion of 50 per cent ownership should not be rigidly applied. Rather, account should be taken in many cases of the criterion of control through the appointment of directors or the number of votes controlled. Other participants expressed doubts about the identification of public corporations and quasi-corporations solely on the basis of the existence of separate accounts. Comments were also made on enterprises whose goods were sold primarily to the Government at cost prices bearing no relationship to market prices. It was indicated in reply that the distinction between market producers and non-market producers had to be taken into account as an additional criterion for distinguishing between the Government and corporations. However, it was indicated that the various criteria were still being studied by the expert groups.

85. Conclusion: No objection was raised to the criterion of corporations and unincorporated enterprises or to the distinction between public and private enterprises.

3. Taxes and other public sector transfers

86. The expert groups had proposed that the terms "indirect taxes" and "direct taxes" used in the 1968 SNA should be replaced by the terms "taxes on production and imports" and "current taxes on income and wealth etc.", respectively. The

annex to the discussion paper contained the proposal for the classification of such transactions.

87. In reply to questions, it was indicated that imputed taxes and implicit subsidies were included in the same categories as the actual taxes and subsidies. The new terminology on taxes on production, income and capital had been introduced in order to reflect more accurately the collection basis and the classification of the taxes in SNA.

88. Conclusion: The participants raised no objections to the aspects of classification and coverage of taxes or to the changes in the relevant terminology in the revised SNA.

II. ACCOUNTING FRAMEWORK

89. The proposed accounting framework was explained in detail and commented upon during the first three days of the seminar. During the discussion, one participant stated that the supply and demand table should be constructed on the basis of producers' and purchasers' prices. On the basis of those alternative valuations it would be possible to construct a matrix of trade and transport margins.

90. In discussing the links between the classification of the production accounts according to activity and institutional sector, it was suggested that illustrative data should be included in the tables in order to provide a better understanding of the relationship between the two kinds of classification.

91. The relationship between the balance of payments and the external account was discussed in terms of the transactions covered. Several participants stated that the balance of payments of their countries included only transactions in foreign currency and were expressed only in those currencies. It was indicated in reply that there was no difference in principle between the balance of payments and the external sector of SNA in that regard; the two types of analysis had to include all transactions with the rest of the world, independently of the currency used for the transaction.

92. Various suggestions and observations were made concerning the integrated economic accounts for the nation: (1) separate columns should be included for taxes on products not included in value added; that would avoid the confusion which existed as a result of the inclusion of those taxes only in the national economy column; (2) the category of net taxes on products should be separated into taxes and subsidies on products; (3) a clearer method should be devised for recording consumption of fixed capital; (4) additional columns should be included in the balance of payments; that would make it possible to present the external sector from the point of view of both the national economy and of the rest of the world.

93. In connection with the presentation of the sequence of accounts, there was a discussion of the allocation and treatment of insurance technical reserves, financial leasing, external transfers by non-residents and imputed rent on owner-occupied dwellings.

94. With regard to the treatment of statistical discrepancies, it was explained that the system defined the concepts and the interrelationship between them and that the practical problem of statistical discrepancies would be dealt with in handbooks to accompany the revised system.

95. Clarification was requested concerning the treatment and classification of the destruction of assets by insurable risks, which was not identified separately in the classification of capital transactions or in the categories of the "other changes in the volume of assets" account.

96. Although the system included a revaluation account, that account was placed at the end of the real accounts. That constituted a problem for high-inflation economies of the region. There was a need to develop combined analysis of the real process and the inflationary aspect.

97. Another topic discussed was that of the supply and use table. It was pointed out that that table could be called an input-output table. That view did not gain acceptance, since an input-output table had very different features in terms of the categories of classification and valuation of flows of goods.

98. One participant advocated including a matrix in the system along the lines of table 2.1 of the 1968 SNA. Another suggested that the revised SNA should provide a more coherent elaboration of codes for transactions, transactors and accounts than that given in the 1968 SNA. Support was expressed for the inclusion of satellite accounts and other applications of the system since they provided a clearer picture of the relationship between the system and other kinds of analyses.

99. Conclusion: A brief review was conducted of the issues considered in detail during the first days of the seminar, relating to classifications, accounts and tables, the adaptation of specific analytical uses and links with other systems of statistics. Participants considered that the presentation of the accounting structure was useful for specialists in national accounts in explaining and understanding the full integrated system, but they felt it advisable to codify transactions in order to facilitate exchanges involving computer programmes and to present a simplified handbook and accounting structure for users.

Accounting rules

100. Accounting rules would be made explicit in a separate chapter of the revised SNA, which would include information on kinds of imputations, consolidation rules and the basis for recording transactions.

101. Comments were made on the need to ensure compatibility between SNA and the IMF system of government finance statistics as regards the consolidation rules of the government sector.

102. Conclusion: The participants took note of the general principles to be included in the chapter on accounting rules, which was in the final drafting stages.

III. TERMINOLOGY

103. A proposal of the Economic Commission for Latin America and the Caribbean (ECLAC) on national accounts terminology in Spanish was circulated; the comments of participants on the proposal were sought with the aim of working out standardized terminology for national accounts to be used by the Spanish-speaking countries of the region and for inclusion in the Spanish version of the revised SNA.

IV. REVISION OF SNA FROM THE LATIN AMERICAN AND CARIBBEAN POINT OF VIEW

104. Conclusion: With regard to the proposed revision of SNA, there was a general consensus to stress the progress made in the conceptual framework, highlighting, among other outstanding general aspects, the integration of flows in the balances, the presentation of integrated accounts by institutional sectors, the introduction of accounting adjustments for the analysis of inflation and the harmonization achieved with other statistical systems.

V. IMPLEMENTATION OF THE REVISED SNA

105. It was pointed out that in countries experiencing high inflation, there was a need to compile national accounts more frequently than on a quarterly basis. Regional accounts were also very important for the countries of the region. The Statistical Office of the United Nations Secretariat and other international bodies must assist the countries of the region in compiling quarterly and regional accounts.

106. Reference was made to the necessity of bringing pressure to bear on national statistical authorities to produce the kind of statistics needed for the development of the new system, as had been done by one country which had introduced changes in its economic census in 1985 so as to include information on institutional types of units. It was recommended that a handbook be prepared establishing priorities for statistical information systems.

107. Several participants referred to the substantial theoretical and conceptual progress which the new system of national accounts represented, although they believed the new system would be difficult to apply. It was argued that, for analytical reasons, there was a great need for users and those responsible for compiling national accounts in the countries of the region to alter their views concerning the role of national accounts and to make an effort to replace the traditional approach, which emphasized production accounts, with a much broader implementation of the system. Several participants said that they had no objections to the integrated approach of the new system, but emphasized the need for technical, financial and training assistance for the practical implementation of the fourth revision of SNA.

108. With regard to the text of the revised SNA in other languages, it was indicated that the chapters and annexes that would be submitted to the United

Nations Statistical Commission in February 1991 were in the process of being translated into Arabic, Chinese, French, Russian and Spanish. The final version in Spanish would be translated by Spain and edited by ECLAC. Financial assistance was being sought for the translation of the new system into Portuguese, since speakers of that language numbered approximately 250 million.

109. Conclusion: In the concluding discussion of the seminar, serious concern was expressed about the real possibility of applying the new system in the short and medium term. The most important factors, which had also affected the implementation of the existing version, included (a) the difficulties which were still being encountered in the area of basic statistics; (b) the constant turnover of technical personnel, which required continuing efforts in the area of staff training and adversely affected specialization by staff; (c) the growing need to concentrate efforts on short-term analysis - instead of maintaining, improving or expanding the system itself - and, at the same time, the difficulty in implementing instruments for such analysis, a difficulty aggravated by the inflationary process taking place in most countries of the region. Lastly, it was emphasized that the region would have increased needs for technical co-operation and training in the area of national accounts and basic statistics. The international organizations attending the seminar were called upon to give consideration to those needs in their programmes of activity and budgets.

Annex

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